SHARP SERVICE MANUAL

SUPPLEMENT

No. 00ZFDC500SME2

FACSIMILE

Illustration: FO-DC500

MODEL FO-DC500
MODEL FO-DC600

MODEL	SELECTION CODE	DESTINATION
FO-DC500	U	U.S.A./Canada
FO-DC600	U	U.S.A./Canada

OPTION

LAN Network interface kit
MODEL FO-LN1

Network printer kit
MODEL FO-NP1

Network scanner kit
MODEL FO-NS2

The software for this model has been upgraded since September 2003. Refer to the additional manual for changes in the software, specifications and parts.

SHARP CORPORATION

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The contents are subject to change without notice.

FO-DC500U
FO-DC600U

1. Specification changes

No.	Description	Purpose	Corresponding page in service manual	
			FO-DC500U	FO-DC600U
1	REPORT key operations modified	Functionality improvement	1-3	1-3
2	Max. scan length changed: 19 to 38 inches	Functionality improvement	1-1, 1-4, 2-21	1-1, 2-21
3	Display thumbnails of attachments to Transaction Report	Functionality improvement	2-21	2-21
4	Line monitor added	Functionality improvement	2-14	2-14
5	Fax Transfer function added	Functionality improvement	2-20	2-20
6	PC FAX function added	Functionality improvement	2-20	2-20
7	Multicast transmission function added	Functionality improvement	2-20	2-20
8	Insertion of separate page when network printing	Functionality improvement	2-21, 2-23, 2-32, 2-33	2-21, 2-23, 2-32, 2-33
9	Activation switch added for activating new functions	Service	2-2, 2-6	2-2, 2-6

2. Soft switch changes

SW NO.	DATA NO.	ITEM	Switch setting and function		Initial setting	Remarks
			1	0		
SW9	8	Action when RTN received	Handle to no error	Handle to error	0	Change
SW22	4	Line monitor up to Phase A	On	Off	0	Addition
	5	Monitoring dial signal up to Phase A	Monitoring fax signal and dial signal	Monitoring fax signal only	0	Addition
SW60	1	Reserved			1	Change
	2	Reserved			1	Change
	3	Reserved			1	Change
	4	Reserved			1	Change
SW66	7	Maximum size of input document	38 inch	19 inch	1	Addition
SW68	3	Image length of TX transaction report	Reduce image of whole 1st page	15 cm image from top of 1st page	1	Addition
SW78	4	Criterion of resolution when receiving	Millimeter	Not specified	0	Addition
SW86	6	Transferred fax image	Printed at transferred error only	Printed every time	0	Addition
	7	Insertion of Adobe's URL into E-mail	No	Yes	0	Addition
SW90	1	Method of detecting CI frequency	Firmware	Modem	0	Addition

3. After upgrading FLASH ROM

After upgrading from version TA69D or earlier to TA69F (Sep. version) or later on FO-DC500, or after upgrading from version TA70C or earlier to TA70E (Sep. version) or later on FO-DC600, perform the following to activate the functions 1, 2, 3, 5, 6 and 7 in "Specification changes".

Go through MENU → 9 → ⋇ → 8 → # → 7 → START to enter the diag mode. Then holding down Z key, select "Upgrade Setting" and press START to perform upgrade.

* After this operation, the bit is set to "1" for soft switches SW60 No.1-No.4, SW66 No.7 and SW68 No.3.

* When there is no data to save, clear the memory after upgrading. Settings return to the default and the specification changes above become effective.

4. Connection between network option and FLASH ROM version

	FO-LN1		FO-NP1	
	Manufactured in or before Aug.	Manufactured in or after Sep.	Manufactured in or before Aug.	Manufactured in or after Sep.
FO-DC500: TA69D or earlier FO-DC600: TA70C or earlier	O	X(*1)	O	Δ(*3)
FO-DC500: TA69F or later FO-DC600: TA70E or later	X(*2)	O	Δ(*3)	O

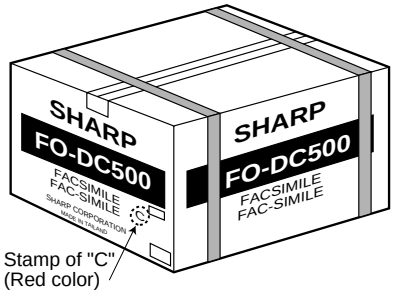
(*1) : Existing functions are supported and none of new functions are.
(*2) : PC FAX cannot be used (additional software will be made available on the Web by U.S.A.)
(*3) : See the attached manual for the printer driver installation procedure.

5. Part changes

FO-DC500/FO-DC600

CURRENT MODEL		→	From September Production			
Item	Part code		Item	Part code	Price rank	Remarks
FO-DC500 IC, FLASH ROM (Ver.: TA69D)	VHIF032/TA69D		IC, FLASH ROM (Ver.: TA69F)	VHIF032/TA69F	BP	Upgrading FLASH ROM
FO-DC600 IC, FLASH ROM (Ver.: TA70C)	VHIF032/TA70C		IC, FLASH ROM (Ver.: TA70E)	VHIF032/TA70E	BN	Upgrading FLASH ROM
FO-DC500 Operation panel case	GCASP2163XHSB		Operation panel case	GCASP2163XHSK	AZ	The change of the operation panel case display.
FO-DC600 Operation panel case	GCASP2163XHSC		Operation panel case	GCASP2163XHSL	AZ	The change of the operation panel case display.
Operation manual	TINSE4302XHTC		Operation manual	TINSE4302XHTD	AS	Revise the operation manual by adding the description of additional features.

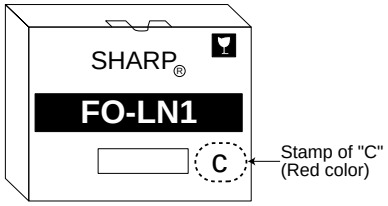
* Look for stamp on the carton to distinguish before/after changed production.



FO-LN1

CURRENT MODEL		→	From September Production			
Item	Part code		Item	Part code	Price rank	Remarks
Installation manual	TCADZ3521XHZZ		Installation manual	TCADZ3620XHZZ	AG	Unification with FO-LN1G(For Europe and Australia).
CD ROM	UDSKA2039XHZZ		CD ROM	UDSKA2045XHZZ	AY	Add. PC FAX driver software and its instruction data.
			PC FAX driver installation manual	TCADH3648XHZZ	AE	New instruction sheet for PC FAX driver installation.
			Document admin setting manual	TCADH3649XHZZ	AE	New instruction sheet for Document admin function.

* Look for stamp on the carton to distinguish before/after changed production.



FO-NP1

CURRENT MODEL		→	From September Production			
Item	Part code		Item	Part code	Price rank	Remarks
Installation manual	TCADZ3523XHZZ		Installation manual	TCADZ3621XHZZ	AG	Unification with FO-NP1G(For Europe and Australia).
CD ROM	UDSKA2040XHZA		CD ROM	UDSKA2040XHZB	AY	Change of folder name of Printer Driver for Windows 2000/XP.
Operation manual	TINSE4313XHTZ		Operation manual	TINSE4313XHTB	AM	Revise the operation manual changed by the change above mentioned.

↓

From November Production			
Item	Part code	Price rank	Remarks
CD ROM	UDSKA2040XHZC	AY	Multi-laguage Software and acquiring WHQL and add. the operation manual other than Englishversion into CD ROM.
Operation manual	TINSE4313XHTC	AM	Revise the operation manual by multi-lingualization; Add. a note that other language version is stored in CD ROM, Multi-lingualization of software license.

FO-DC500U
FO-DC600U

FO-NS2

CURRENT MODEL	
Item	**Part code**
Operation manual	TINSE4314XHTB
CD ROM	UDSKA2041XHZA

→

From September Production			
Item	**Part code**	**Price rank**	**Remarks**
Operation manual	TINSE4314XHTC	AQ	Revise the operation manual by expansion of Max. scanning length.
CD ROM	UDSKA2041XHZA	AY	No change.

↓

From November Production			
Item	**Part code**	**Price rank**	**Remarks**
Operation manual	TINSE4314XHTD	AQ	Add. a note that other languge versions is stored in CD ROM, Multi-lingualization of software license.
CD ROM	UDSKA2041XHZB	AY	Add. the operation manual other than English version into CD ROM.

CHAPTER 1. GENERAL DESCRIPTION

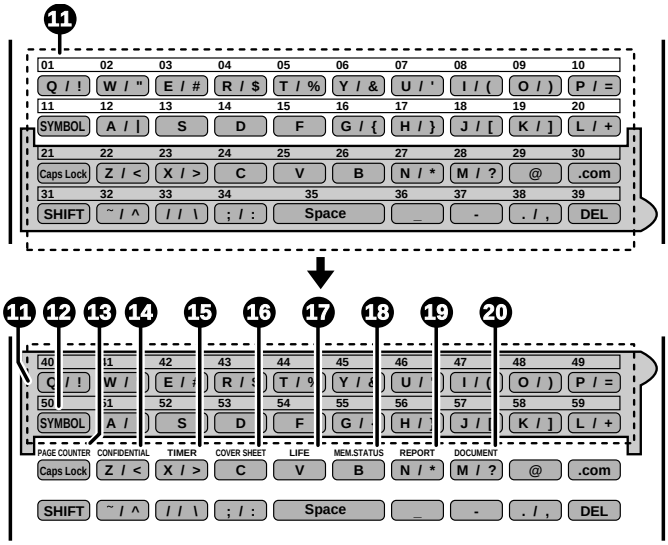
: Change

[1] Specifications

- **GENERAL**

Input document size: Automatic feeding:
Width: 5.8 to 10.1” (148 to 256mm)
Length: 5.0 to 14.3” (128 to 364 mm)
Manual feeding:
Width: 5.8 to 11.0” (148 to 279 mm)
Length: 5.0 to 19.0” (128 to 483 mm)

[3] Operation panel

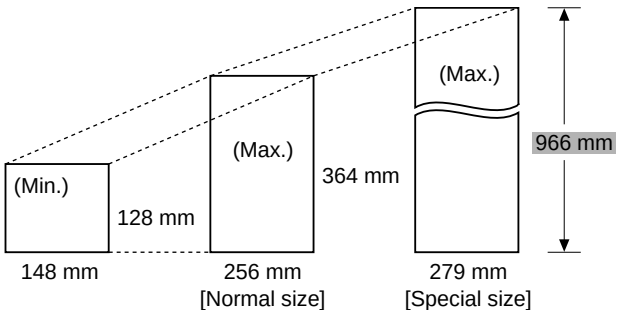


19 REPORT key
Press this key before sending a fax (or a Scan to E-mail/FTP/ Desktop transmission when the network scanner option is installed) to have a transaction report printed out after the transmission is finished.

[4] Transmittable documents

1. Document Sizes

Normal size	width	5.8" – 10.1" (148 – 256 mm)
	length	5.0" – 14.3" (128 – 364 mm)



: Change/Addition

[2] Diagnostics and service soft switches

1. Operating procedure

Two kinds of diagnoses are supported.

1-1. Fax diagnosis

This diagnosis is concerned with the main body of fax which is used for production and service support.

Entering the diagnostic mode

Press MENU → 9 → ✳ → 8 → # → 7 , and the following display will appear.

```
FAX  : TA69✳ or TA70✳
NIC  :x.xxx
PRN  :xxxx

PRN  MEMORY  SIZE  =  16(MB)
GAA  :  ESx    GAB  :  ESx
```

1st	Line	
2nd	Line	
3rd	Line	F/W version
4th	Line	NIC board version
5th	Line	PCL board version
6th	Line	
7th	Line	Memory size
8th	Line	GATE arrayA/B version
9th	Line	

Then press the START key. Select the desired item with the ✳ key and the # key or select with the rapid key.

Enter the mode with the START key.

(Diag・specifications)

MENU → 9 ✳ 8 # 7 → TA69✳ or TA70✳ → START

A	START	SOFT SWITCH MODE
B	START	PRINT AREA
C	START	ROM & RAM CHECK
D	START	AUTO FEEDER MODE
E	START	AGING MODE
F	START	PANEL CHECK MODE
G	START	OPTICAL ADJUST MODE
H	START	PRODUCT CHECK
I	START	SIGNAL SEND MODE
J	START	COMM. CHECK MODE
K	START	MEMORY CLEAR MODE
L	START	FLASH MEMORY CHECK
M	START	ALL FAX/TEL. ENTRY MODE
N	START	DEPT. PASSCODE
O	START	CONF. PASSCODE
P	START	SIGNAL SEND MODE 2
Q	START	MEMORY SET MODE
R	START	STAMP AGING MODE
S	START	DIAL TEST MODE
T	START	COPY DIAG MODE
U	START	LCD CHECK MODE
V	START	PERSONAL BOOK LIST
W	START	FONT LIST PRINT MODE(*)
X	START	NO FUNCTION
Y	START	NO FUNCTION
Z	START	UPGRADE SETTING

*: FONT LIST PRINT MODE can be used only when the network function is effective.

S) Dial test mode

The mode is used to inspect whether dialing is accurate in two kinds of dial modes . All data which can be dialed in this mode are automatically called up in both PB mode and DP mode.

[In case that 2 line optional is not mounted.]

① Turn on CML, and dial the following in the PB mode.
1, 2, 3, 4, 5, 6, 7, 8, 9, ✳, 0, #

② Dial the following in the DP mode.
1, 5, 9, 0

③ After dialing, turn off CML.

NOTE:
This mode uses the ordinary auto dial. (Accordingly, the signal sending time and minimum pause are all the same as ordinary.
The measurement result in this mode is completely all the same as in the ordinary dial mode.)

T) Copy diag mode

This mode is for automatic mode selection of copy to reduce the time for treatment at the time of production.

① Set 2 sheets of document. (No problem if there are 2 sheets or more.)

② 3 sheet continuous copy: 1st sheet in the FINE AUTO
2nd sheet and after that are copied in the H-TONE DARK.

NOTE: Input of the image quality and the darkness keys is invalid in this mode.

U) LCD check mode

This is an item to check that the LCD acts normally.

① The screen for selecting the contrast adjustment mode and the "H" display mode appears.

```
U:LCD  CHECK  MODE
1=CONT.ADJ  2=TEST  DISP
```

② Select the mode using the "←" or "→" keys or otherwise dial keys "1" or "2".

[When the contrast adjustment mode is selected]

③ Adjust with the "←" or "→" keys so that both right and left halves of the "A" can be recognized.

```
CONTRAST=-9    TEMP=+25

A
```

[When the "H" display mode is selected]

③ Turn on the backlight so that the whole screen shows "H". (26 letters x 9 lines)

```
HHHHHHHHHHHHHHHHHHHHHHHHHH
HHHHHHHHHHHHHHHHHHHHHHHHHH
HHHHHHHHHHHHHHHHHHHHHHHHHH
HHHHHHHHHHHHHHHHHHHHHHHHHH
HHHHHHHHHHHHHHHHHHHHHHHHHH
HHHHHHHHHHHHHHHHHHHHHHHHHH
HHHHHHHHHHHHHHHHHHHHHHHHHH
HHHHHHHHHHHHHHHHHHHHHHHHHH
HHHHHHHHHHHHHHHHHHHHHHHHHH
```

V) Personal book list

The PASSCODE of the personal book 00 to 10 are output.

W) Font list print mode [Only when network function is mounted]

The font list that can be used in the network function is printed.

X) No function

Y) No function

Z) Upgrade setting

After upgrading from version TA69D or earlier to TA69F or later on FO-DC500U, or after upgrading from version TA70C or earlier to TA70E (Sep. version) or later on FO-DC600U, enter this mode to use new functions.

4. Soft switch description

: Change/Addition

• Soft switch

SW NO.	DATA NO.	ITEM	Switch setting and function					Initial setting	Remarks
			1		0				
SW9		CED tone signal interval		75ms	500ms	750ms	1000ms		
	1		No. 1	0	0	1	1	0	
	2		No. 2	0	1	0	1	0	
	3	Equalizer freeze	On		Off			0	
	4	Equalizer freeze conditions	All		7200bps			0	
	5	CED detection time	500ms		1000ms			0	
		Alarm buzzer		3sec	1sec	No BEEP	No BEEP		
	6		No. 5	0	0	1	1	0	
	7		No. 6	0	1	0	1	0	
	8	Action when RTN received	Handle to no error		Handle to error			0	
SW22	1	Reserved						0	
	2	Reserved						0	
	3	Reserved						0	
	4	Line monitor up to Phase A	On		Off			0	
	5	Monitoring dial signal up to Phase A	Monitoring dial signal up to Phase A		Monitoring fax signal only			0	
	6	Reserved						0	
	7	Reserved						0	
	8	Reserved						0	
SW60	1	Reserved						1	
	2	Reserved						1	
	3	Reserved						1	
	4	Reserved						1	
	5	Reserved						0	
	6	Reserved						0	
	7	Reserved						0	
	8	Reserved						0	
SW66	1	Reserved						0	
	2	Reserved						0	
	3	Reserved						1	
		Cassette selection of separate page		None	Tray	1st Cass.	N/A		OPTION
	4		No. 4	0	0	1	1	0	
	5		No. 5	0	1	0	1	1	
	6	Reserved						0	
	7	Maximum size of input document	STD/Fine/S-Fine=38 inch, U-Fine=19 inch		19 inch			1	
	8	Reserved						0	
SW68		Distinctive ring pattern		U.S.A.	Canada	Australia	Hong Kong	For U.S.A.	For Canada
	1		No. 1	0	0	1	1	0	0
	2		No. 2	0	1	0	1	0	1
	3	Image length of TX transaction report	Reduced image of whole 1st page		15 cm image from top of 1st page			1	
	4	Reserved						1	
	5	Reserved						0	
	6	Reserved						0	
	7	Reserved						1	
	8	Reserved						0	
SW78	1	Reserved						1	
	2	Reserved						0	
	3	Reserved						0	
	4	Criterion of resolution when receiving	Millimeter		Not specified			0	
	5	Reserved						0	
	6	Reserved						0	
	7	Reserved						0	
	8	Reserved						0	
SW86	1	Reserved						0	
	2	Reserved						0	
	3	Reserved						0	
	4	Reserved						0	
	5	Reserved						0	
	6	Transferred fax image	Printed at transferred error only		Printed every time			0	
	7	Insertion Adobe's URL into E-mail	No		Yes			0	
	8	Reserved						0	
SW90	1	Method of detecting CI frequency	Firmware		Modem			0	
	2	Reserved						0	
	3	Reserved						1	
	4	Reserved						0	
	5	Reserved						0	
	6	Reserved						1	
	7	Reserved						0	
	8	Reserved						1	

: Change/Addition

• Soft switch function description

SW22 No. 1 ~ No. 3 Reserved
Set to "0".

SW22 No. 4 Line monitor up to Phase A
When set to “1”, the line sound is monitored until phase A.

SW22 No. 5 Monitoring dial signal up to Phase A
Dial signals as well as facsimile signals are set to be monitored by setting soft switch SW22 No.4 to “1” when it is active.

SW22 No. 6 ~ No. 8 Reserved
Set to "0".

SW60 No. 1 ~ No. 4 Reserved
Set to "1".

SW60 No. 5 ~ No. 8 Reserved
Set to "0".

SW66 No. 1, No. 2 Reserved
Set to "0".

SW66 No. 3 Reserved
Set to "1".

SW66 No. 4, No. 5 Cassette selection of separate page
The supply origin of a separate page is set.

SW66 No. 6 Reserved
Set to "0".

SW66 No. 7 Maximum size of input document
The maximum scan length can be switched.

SW66 No. 8 Reserved
Set to "0".

SW68 No. 1, No. 2 Distinctive ring pattern
The distinctive ring patter is set for country.

SW68 No. 3 Image length of TX transaction report
The size of images can be selected to attach to Transaction Report.

SW68 No. 4 Reserved
Set to "1".

SW68 No. 5, No. 6 Reserved
Set to "0".

SW68 No. 7 Reserved
Set to "1".

SW68 No. 8 Reserved
Set to "0".

SW78 No. 1 Reserved
Set to "1".

SW78 No. 2, No. 3 Reserved
Set to "0".

SW78 No. 4 Criterion of resolution when receiving
A standard resolution can be set for received images.

SW78 No. 5 ~ No. 8 Reserved
Set to "0".

SW86 No. 1 ~ No. 5 Reserved
Set to "0".

SW86 No. 6 Transferred fax image
By default, received fax images are printed by the machine. To set it to print only when email forwarding fails, change this switch to “1”.

SW86 No. 7 Insertion of Adobe’s URL into E-mail
When sending emails with a PDF file attached, the URL of Adobe is included in the body text. To prevent this, set this switch to “1”.

SW86 No. 8 Reserved
Set to "0".

SW90 No. 1 Method of detecting CI frequency
If CI signal detection is interrupted by noise, switch to Firmware detection.

SW90 No. 2 Reserved
Set to "0".

SW90 No. 3 Reserved
Set to "1".

SW90 No. 4, No. 5 Reserved
Set to "0".

SW90 No. 6 Reserved
Set to "1".

SW90 No. 7 Reserved
Set to "0".

SW90 No. 8 Reserved
Set to "1".

FO-DC500U
FO-DC600U

SHARP

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